California
Energy Commission
Research & Development

GFO-17-501 Pre-Application Workshop

Improving Natural Gas Energy Efficiency, Waste Heat-to-Power, and Near-Zero Emission Distributed Generation Systems

Los Angeles Cleantech Incubator
August 23, 2017
Kevin Uy, David Weightman

Agenda

Time	Topic
2:00 pm	Welcome and Introductions • Housekeeping • Commitment to Diversity • Connect with Us
2:15 pm	Solicitation Information • Program Background, Drivers, and Motivation • Purpose, Groups, and Funding • Key Dates • Application Requirements
3:00 pm	Questions and Answers
4:00 pm	Adjourn

Housekeeping

- In case of emergency
- Facilities
- Sign-in sheet / Business card sheet
- Updates on solicitation documents including this presentation will be posted at the Grant Funding Opportunity's webpage: http://www.energy.ca.gov/contracts/pier.html#GFO-17-501

Commitment to Diversity

The Energy Commission adopted a resolution strengthening its commitment to diversity in our funding programs. We continue to encourage disadvantaged and underrepresented businesses and communities to engage in and benefit from our many programs.

To meet this commitment, Energy Commission staff conducts outreach efforts and activities to:

- Engage with disadvantaged and underrepresented groups throughout the state.
- Notify potential new applicants about the Energy Commission's funding opportunities.
- Assist applicants in understanding how to apply for funding from the Energy Commission's programs.
- Survey participants to measure progress in diversity outreach efforts.

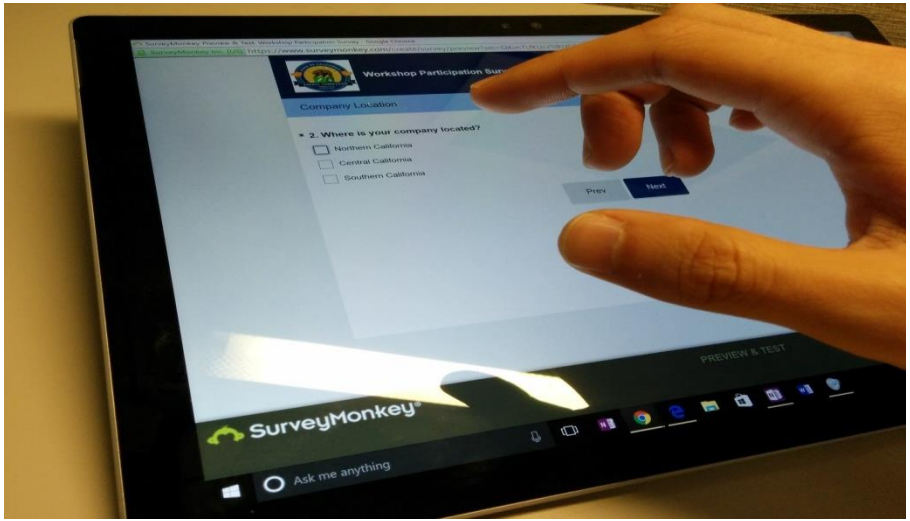
We Want to Hear From You!

1 minute survey

The information supplied will be used for public reporting purposes to display anonymous overall attendance of diverse groups.

- iPads are being passed around the room
- WebEx participants took the survey when joining

Thanks for your time!



Connect with the Energy Commission

https://www.facebook.com/CAEnergy/

http://bit.ly/CalEnergyNetwork

https://twitter.com/CalEnergy

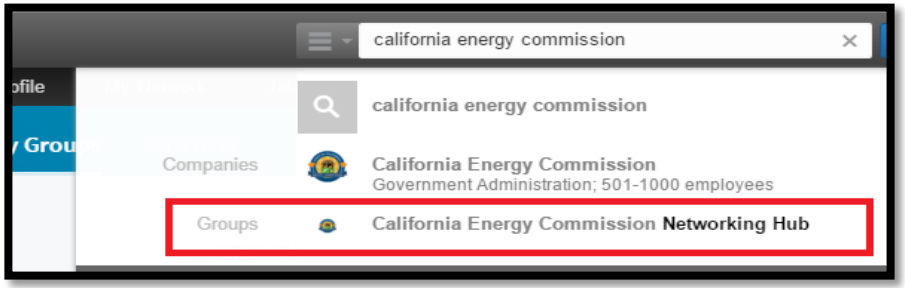
…and the Energy Commission's listserves
www.energy.ca.gov/listservers

Find Partners via LinkedIn

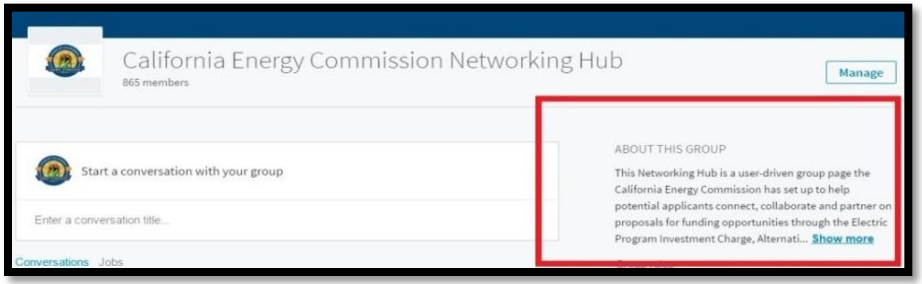
The Energy Commission created a user-driven LinkedIn group page to help potential applicants **connect, collaborate** and **partner** on proposals for funding opportunities.

Join the "California Energy Commission Networking Hub" using:

- The LinkedIn Search Box
- URL: bit.ly/CalEnergyNetwork



Then, use the 'About this Group' section on the LinkedIn group page to find funding opportunity specific subgroups.



Subgroup page for this GFO: https://www.linkedin.com/groups/13542993

LinkedIn Networking Webinar

This virtual networking webinar is an opportunity for interested applicants to introduce themselves, explain their interests in this solicitation, and what they seeking from potential project partners. Individuals are encouraged to participate to leverage their connections.

The one-hour webinar will held be on **September 5 at 2:00 PM**

Go to energy.webex.com and enter **Meeting Number: 491 378 813**

No password is required.

Subscribe to the subgroup: https://www.linkedin.com/groups/13542993

NOTE:

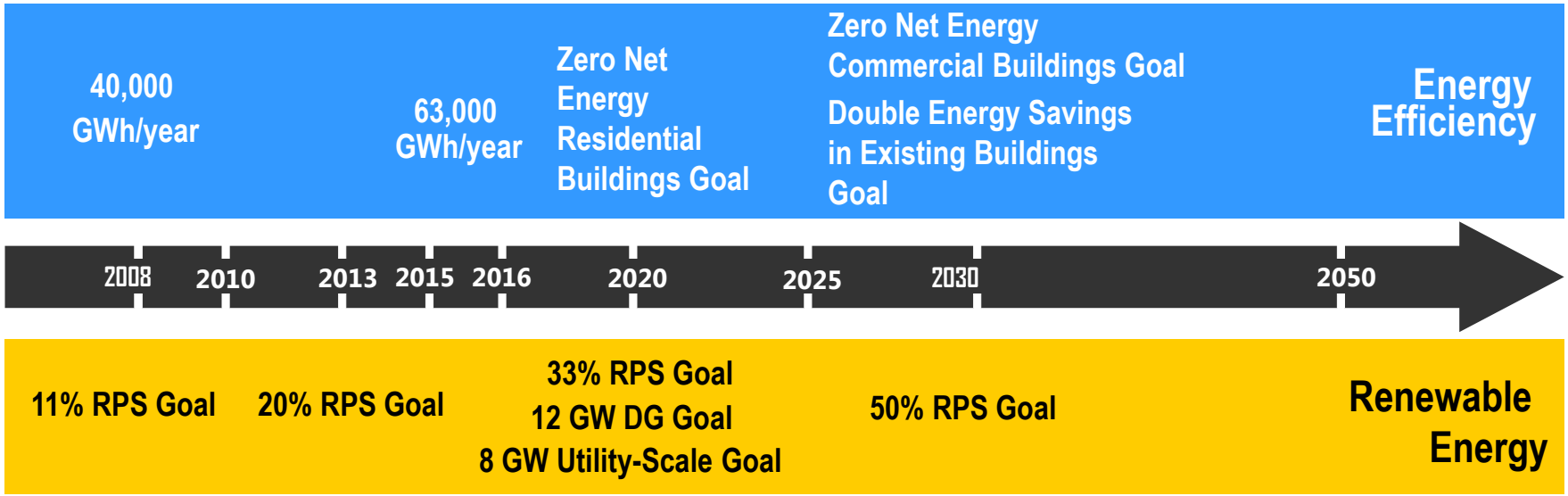
- Energy Commission staff will facilitate introductions.
- Staff involved in development of the solicitation and scoring of proposals will not be present.
- Staff will not provide answers to questions on GFO-17-501
- All questions must be submitted to the Contract Agreement Officer.

Natural Gas Program Background

- The Natural Gas Research, Development and Demonstration Program is funded by a natural gas ratepayer surcharge established by the California Public Utilities Commission (CPUC) in 2004
- The purpose of the Natural Gas RD&D Program is to benefit the ratepayers of natural gas investor-owned utilities*
- The Natural Gas RD&D Program funds clean energy technology projects that promote greater natural gas reliability, lower costs, and increased safety
- Funded projects must lead to technological advancement and breakthroughs to overcome the barriers that prevent the achievement of the state's statutory energy goals.
- Annual program funds total $24 million

* Pacific Gas and Electric Co., San Diego Gas and Electric Co., and Southern California Gas Company

State Energy Policy Drivers



Solicitation Purpose

The purpose of this solicitation is to fund:

- **Industrial Energy Efficiency** projects focused on reducing natural gas use;
- **Waste-Heat-to-Power** projects focused on recovering industrial waste heat for power generation;
- **Near-Zero Emission Distributed Generation** projects focused on minimizing pollutant emissions; and
- A **Technical Assessment** to identify energy efficiency research needed to reduce natural gas use in the chemicals and allied products manufacturing industry.

Key Dates

Activity	Action Date
Solicitation Release	8/11/2017
Pre-Application Workshop	8/23/2017, 2:00 pm
Deadline for Written Questions	**8/28/2017, 5:00 pm**
Anticipated Distribution of Questions and Answers	Week of 9/11/2017
Phase 1	
Deadline to Submit Applications	**10/10/2017, 5:00 pm**
Anticipated Notice of Proposed Award Posting Date	Week of 11/13/2017
Anticipated Energy Commission Business Meeting Date	2/14/2018

Key Dates (Cont.)

Activity	Action Date
Phase 2 (If funds remain from Phase 1)	
Deadline to Submit Applications	**12/19/2017, 5:00 pm**
Anticipated Notice of Proposed Award Posting Date	Week of 1/29/2018
Anticipated Energy Commission Business Meeting Date	4/11/2018
Anticipated Agreement Start Date	June 2018
Group 4 Anticipated Agreement End Date	December 2019
Groups 1, 2, and 3 Anticipated Agreement End Date	June 2021

Available Funding

There is up to $10,700,000 available for this solicitation.

Project Group	Available Funding	Minimum Award Amount	Maximum Award Amount	Minimum Match Funding
Group 1: Develop and Demonstrate Energy Efficiency Technologies and Strategies to Reduce Natural Gas Use in the Industrial Sector	$6,260,000	$750,000	$1,500,000	10%
Group 2: Develop and Demonstrate Cost-effective Waste Heat to Power Systems for California Industries	$2,140,000	$750,000	$1,500,000	10%
Group 3: Develop and Demonstrate Near-Zero Emission Small and Micro-scale Distributed Generation Systems	$2,000,000	$750,000	$1,500,000	10%
Group 4: Technical Assessment of the Energy Efficiency Potential of the Chemicals and Allied Products Industry	$300,000	$300,000	$300,000	Optional

Priority Funding for Southern California

- Groups 1, 2, and 3 projects which perform a demonstration project in Southern California are eligible for prioritization of funding
- For the purpose of this solicitation, Southern California is defined as Natural Gas IOU service territory in the following 10 counties: Imperial, Kern, Los Angeles, Orange, Riverside, San Bernardino, San Diego, Santa Barbara, San Luis Obispo, and Ventura
- Up to $6 million reserved for Southern California projects
- For full details on funding prioritization, please refer to the solicitation manual, section I.F

Match Funding

- Groups 1, 2, and 3: At least **10 percent** of the requested Natural Gas R&D funds **is required** as match funding.
- Group 4: Match funding is optional.
- Scoring criteria and bonus points only apply to match funding commitments **above minimum requirements**.
- Match funding contributors must submit match funding commitment letters that meet the requirements of Attachment 11. Failure to do so will disqualify the match funding commitment from consideration.
- Refer to Section 1.F for match fund eligibility.

Match Funding Example

Applicants may receive up to 10 additional points based on the criteria below:

- Up to 5 points will be awarded based on the percentage of match funding that **exceeds the minimum match funding amount**. This ratio will be multiplied by 5 to yield the points.

  For example: If requested Natural Gas funds are $1,000,000, the Applicant must provide at least $100,000 in match funding. If $500,000 is provided in match funding, the amount that will be evaluated for additional points is $400,000. Thus the ratio = $400,000/$1,000,000 = 0.40

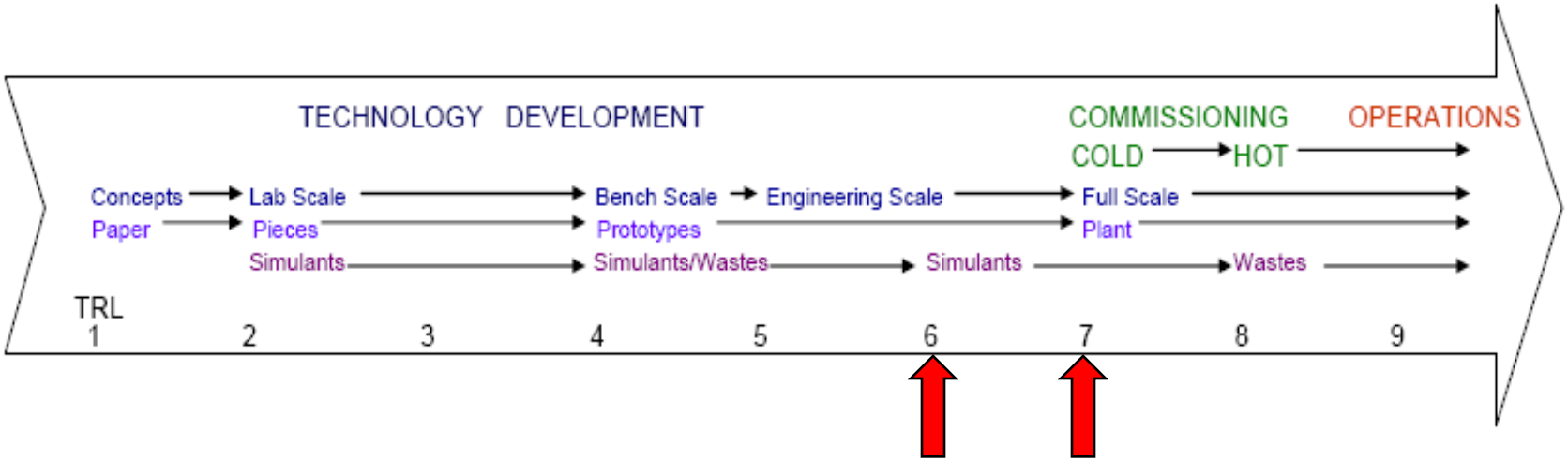
- The remaining 5 points will be based on the level of commitment, type of match funding, dollar value justification, and funding replacement strategy described in the match funding commitment letter.

- See section IV.F for application scoring scale.

Project Groups

- For each project group we will discuss:
  - Funding
  - Purpose
  - Target Technical Specifications
  - Example Projects

Technology Readiness Level



Groups 2, 3 – Achieve TRL 6 by project end

Group 1 – Achieve TRL 7 by project end

*_Technology Readiness Assessment Guide_. Department of Energy
http://www2.lbl.gov/dir/assets/docs/TRL%20guide.pdf

Group 1: Energy Efficiency

- Develop and Demonstrate Energy Efficiency Technologies and Strategies to Reduce Natural Gas Use in the Industrial Sector
- Funding amount and range:
  - Up to $6,260,000 available
  - $750,000 to $1,500,000 per award
  - 10% match funding required

Group 1: Purpose

- **Purpose:** Support targeted industries to reduce natural gas use and to meet carbon reduction goals through improvements in energy efficiency technologies or processes
- Targeted industries include, but are not limited to:
  - Food processing
  - Glass, chemical and cement manufacturing
  - Oil and gas extraction and refining

Group 1: Project Focus

- Projects must focus on natural gas savings from energy efficiency and not from energy generation
- Projects which switch from natural gas to electricity are not eligible
- Applicants must present proposed technical specifications and explain how the project will meet or exceed the technical targets by the end of the agreement term

Group 1: Target Technical Specifications

Applicants must present proposed technical specifications and how the project will meet or exceed the following targets by the end of the agreement term (Technical targets are contained in Section II.B.1.a.)

Efficiency	At least 10% reduction in natural gas use
Lifetime	At least 10 years
Payback	10 years or less
Maturity	TRL 7

Group 1: Example Projects

- Improvements to current waste heat recovery technologies for low temperature (400 deg F) and high temperature (>1200 deg F) with potential to reduce natural gas use by 10%
- Improvements to the efficiency of manufacturing processes that reduce both energy and emissions
- Improvements to glass making technologies
- Advanced chemical control, distillation, and integration processes
- Please refer to the solicitation manual, section II.B.1, for additional examples

Group 2: Waste Heat to Power

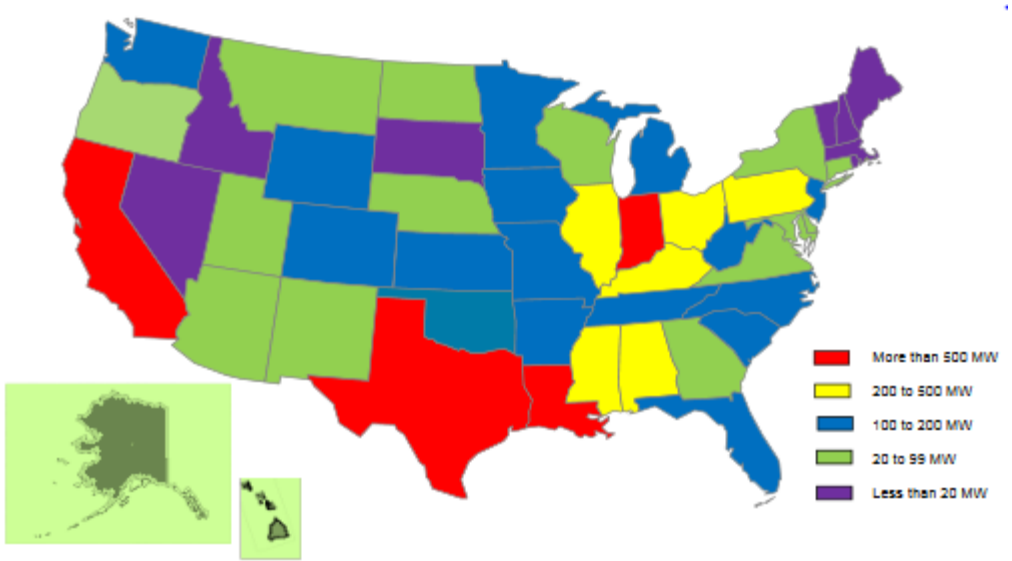
- Develop and Demonstrate Cost-effective Waste Heat to Power Systems for California Industries
- Funding amount and range:
  - Up to $2,140,000 available
  - $750,000 to $1,500,000 per award
  - 10% match funding required

Group 2: Purpose

- **Purpose:** Support technological advances needed for a wide-scale adoption of waste heat to power in California industries.
- Targeted industries include, but are not limited to:
  - Food processing
  - Metal, glass, and chemical manufacturing
  - Wood and paper product manufacturing

Group 2: Purpose

- California has abundant, virtually untapped potential for waste heat to power systems



**Waste Heat to Power Market Assessment*. ICF International for Oak Ridge National Lab. http://info.ornl.gov/sites/publications/files/Pub52953.pdf

Group 2: Project Focus

- Research should address cost reductions and efficiency improvements in collecting and managing the waste heat, improving its quality for power generation, and improving the power generation systems that take in the waste heat
- Projects focused only on improving industrial waste heat recovery, without demonstrating electricity generation, are not eligible
- Applicants must present proposed technical specifications and explain how the project will meet or exceed the technical targets by the end of the agreement term

Group 2: Target Technical Specifications

Applicants must present proposed technical specifications and how the project will meet or exceed the following targets by the end of the agreement term (Refer to Section II.B.1.b.)

Capacity	1 MWe or less
Efficiency	At least 5% electric efficiency (HHV*) for solid state systems; At least 15% electric efficiency (HHV) for mechanical systems
Lifetime	At least 10 years
Payback	5 years or less
Maturity	TRL 6

*HHV – Higher Heating Value

Group 2: Example Projects

- Emerging technologies for converting waste heat to power, including:
  - Mechanical systems including the Kalina cycle and supercritical carbon dioxide cycle
  - Solid state systems including thermoelectric and thermionic generators
- WHP systems specifically designed to improve the economic performance for lower temperature (150 to 400°F) waste heat resources
- Low-cost, deployable waste heat-to-power systems in industrial facilities with a high potential for replication

Group 3: Near-Zero Emission DG

- Develop and Demonstrate Near-Zero Emission Small and Micro-scale Distributed Generation Systems
- Funding amount and range:
  - Up to $2,000,000 available
  - $750,000 to $1,500,000 per award
  - 10% match funding required

Group 3: Purpose

- **Purpose:** Support technological advances needed to enable near-zero criteria pollutant emissions from distributed generation and combined heat and power systems
- Targeted sectors include light industrial, small commercial, and residential

Group 3: Project Focus

- Research should address the emissions and permitting barriers which face small and micro-scale DG and CHP systems
- In particular, significant reduction in nitrogen oxide (NOx) emissions is targeted due to its contribution to ozone pollution and resultant poor air quality
- Applicants must present proposed technical specifications and explain how the project will meet or exceed the technical targets by the end of the agreement term

Group 3: Target Technical Specifications

Applicants must present proposed technical specifications and how the project will meet or exceed the following targets by the end of the agreement term (refer to Section II.B.1.c.)

Capacity	1 MWe or less
Emissions	CARB* and local air quality district compliant • NOx: 0.07 lb/MWh (31.8 g/MWh) • CO: 0.10 lb/MWh (45.4 g/MWh) • VOCs: 0.02 lb/MWh (9.1 g/MWh)
Efficiency	At least 25% electric efficiency (HHV) At least 80% total efficiency (if using combined heat and power)
Lifetime	At least 10 years
Payback	10 years or less
Maturity	TRL 6

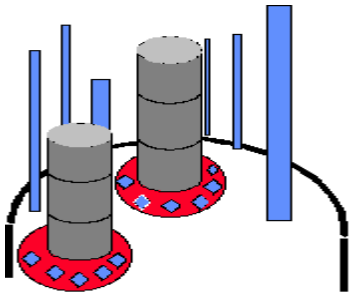
**Distributed Generation Certification Regulation*. California Air Resources Board. http://www.arb.ca.gov/energy/dg/dg.htm (page 5)

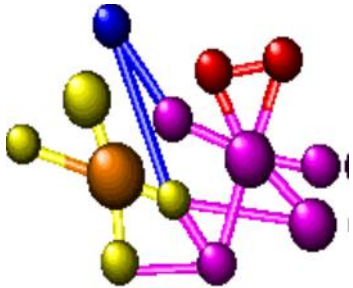
Group 3: Example Projects

- Cost-effective emissions control to enable increased deployment of existing small and micro-scale DG and CHP systems
- Novel systems and strategies for small and micro-scale DG and CHP systems, including:
  - Alternate configurations, new subsystems, or previously ignored applications which drastically increase performance, efficiency, and/or cost-effectiveness
- Hybrid or cascaded DG systems in which heat from one generator drives another

Group 4: Purpose

- Conduct a Study that is a Technical Assessment of the Energy Efficiency Potential of the Chemicals and Allied Products Industry
- Funding amount:
  - Up to $300,000 available for 1 project





Group 4: Focus

- Assess Efficiency related Technologies/Approaches that:
  - Reduce on-site natural gas use and are cost-effective
  - Lower Green House Gas Emissions (GHG)
  - Have potential for market adoption within 5 years
- Not an assessment of operational changes

Group 4: Chemicals And Allied Products

- What are “Chemicals and Allied Products”?
- This industry group includes facilities that make:
  - Industrial Organic and Inorganic Chemicals
  - Polymers, Resins, Rubber
  - Pharmaceutical Products
  - Soap, Detergents and Cleaning Preparations; Perfumes, Cosmetics
  - Paints, Varnishes, Lacquers and Enamels
  - Adhesives, Sealants, Explosives
  - Agricultural and Miscellaneous Chemicals

Group 4: Natural Gas Use Reduction Methods

- **Increase Efficiency** – lower the amount of natural gas used per unit of output or specific process
- **Use Alternative Fuels** – convert or replace equipment that uses natural gas to equipment that uses low or no carbon fuels, such as:
    - **Solar Assist** – Add solar thermal technology to displace or partially displace the use of natural gas
    - **Lower Carbon Fuels** – convert or modify equipment to use less carbon-intensive fuels
    - **Other** - Hydrogen-based fuels

Group 4: Key Goals and Outcomes of Technical Assessment

- Profiles where and how much natural gas is used in the Chemicals and Allied Products manufacturing industry
- Identifies, evaluates and prioritizes unique and crosscutting technological advancements, approaches and strategies to improve natural gas efficiency.
- Estimates the natural gas and GHG emission reduction potential under market adoption scenarios within 5 years.

Group 4: Key Factors to Discuss in Proposal

- For “Technical Approach” identify what tasks will be conducted for the study, and
- What approach will be use to complete the tasks
- For “Team Qualifications” discuss the firm and team member experience relevant to this type of study and industry group

Group 4: Proposal-Related Unique Features

- Separate technical scoring criteria for Group 4 –refer to pages 45-46
  - Technical Approach
  - Team Qualifications

  } Minimum passing score required
  - Budget and Cost Effectiveness
  - PIER Natural Gas Funds Spent in California
  - Ratio of Direct Labor and Fringe Benefit Costs to Loaded Labor Costs
  - Match funding (optional)

- **18 month term for agreement**
- Not location specific

Administrative Requirements

Eligible Applicants

- This is an open solicitation for public and private entities.
- Applicants must accept the PIER terms and conditions.
  - Standard, University of California and Department of Energy T&Cs: **http://www.energy.ca.gov/research/contractors.html**
- Applicants are required to register with the California Secretary of State and be in good standing to enter into an agreement with the Energy Commission. http://www.sos.ca.gov
- Applicants must propose a team with proven ability to successfully complete similar projects.

GFO Submission Requirements (Electronic Submission)

- Preferred method of Delivery is the Energy Commission Grant Solicitation System, available at: https://gss.energy.ca.gov/.
- Electronic files must be in Microsoft Office Word (.doc, .docx) and Excel (.xls, .xlsx) formats, unless originally provided in solicitation in another format.
- Attachments requiring signatures (Application Form and Support/Commitment Letters) may be scanned and submitted in PDF format.
- First-time users must register as a new user to access system.
- Live Demo Tutorial

Live Demo Tutorial (Electronic Submission)

"How to Apply" video will be posted at the Grant Funding Opportunity's webpage:
http://www.energy.ca.gov/contracts/GSS/GSS_How_to_Apply_Video.mp4

GFO Submission Requirements (Hard Copy Submission)

- Submit Applications with all attachments in the order specified by the due date and time listed in Section III of the manual.
- Application documents should meet formatting requirements, page limits, and number of copies specified on page 22.
  - **One** hard copy and **one** electronic copy* containing electronic files of the application.

* CD-ROM or USB memory stick

Application Requirements

Each Applicant must complete and include the following:	
1. Application Form *(requires signature)* (.pdf)	7. Budget (.xls)
2. Executive Summary (.docx)	8. CEQA Compliance Form (.docx)
3. Fact Sheet (.docx)	9. References and Work Product (.docx, .pdf)
4. Project Narrative (.docx)	10. Contact List (.docx)
5. Project Team (.docx, .pdf)	11. Commitment and Support Letters *(letters require signature)* (.pdf)
6. Scope of Work (.docx)	12. California Based Entity Form (.docx)
6a. Project Schedule (.xlsx)	13a. CCHP Cost Calculator (.xlsx)

Be Consistent in your application!

Project Narrative (Attachment 4)

- This is your opportunity to tie everything together and explain the entirety of the project. The narrative should explain:
  - Why your project is important?
  - What you will be doing in your project?
  - How are you going to complete the project?
  - How will ratepayers benefit?
  - What it is going to cost ratepayers, and is it worth it?
  - Address the additional requirements listed in section II.B.1.e

***Please note there are separate templates for groups 1, 2, and 3 and group 4.**

Scope of Work (Attachment 6)

- Tell us exactly what you are proposing to do in your project.
- Identify what you will deliver to the Energy Commission.
- Be sure to include in the tasks:
  - At least one product per task
- Be sure to include Project Schedule (Attachment 6a)
  - Be realistic on when product deliverables can be completed

Budget (Attachment 7)

- Identify how you will be spending Natural Gas funding and match funds to complete this project.
- Each Applicant and subcontractor receiving $100,000 or more of Energy Commission funds must complete the budget forms.
- This must be submitted in the same format (excel file) as it is provided.
- Do not delete sheets or rows, use the hide/expand functions.
  - Shaded cells are automatically filled or calculated.
- Projects that receive an award of public funds from the Energy Commission are likely to be considered a public works project under the California Labor Code and payment of prevailing wage. Payment of prevailing wages can be significantly higher than non-prevailing wages and this should be factored into the budget—refer to Section III.D., item 8, and also the terms and conditions, item 10
- Ensure that any rates provided are MAXIMUM rates for the entire term of the agreement

Commitment and Support Letter Forms (Attachment 11)

- This form provides guidelines for letters of support or commitment that are submitted with the application.
  - Commitment letter commits an entity or individual to providing the service or funding described.
  - Support letter details an entity's or individual's support for the project.
- All Applicants are required to submit **at least one** support letter from a project stakeholder.
- Any project partners that will make other contributions to the project must submit a commitment letter.
- Match funding for each Application must be supported by a match fund commitment letter.
- Limited to two pages per letter, excluding the cover page.

DG-CHP Cost Calculator (Attachment 13a) (Groups 2 and 3 Only)

- Groups 2, and 3 applicants should review the *DG-CHP Cost Calculator* (Attachment 13a) included in the solicitation files.
- Applicants should enter values requested into the model to provide an initial rate of return.
- Applicants must provide a copy of the completed calculator as part of their application package.
- If a calculator is not provided, clearly explain why it is not applicable and provide the requested measures and justifications for these measures in a separate attachment. Refer to the *Guidelines for Cost and Benefit Calculations* (Attachment 13) for methodology and input metrics.

DG-CHP Cost Calculator (Attachment 13a) (Groups 2 and 3 Only)

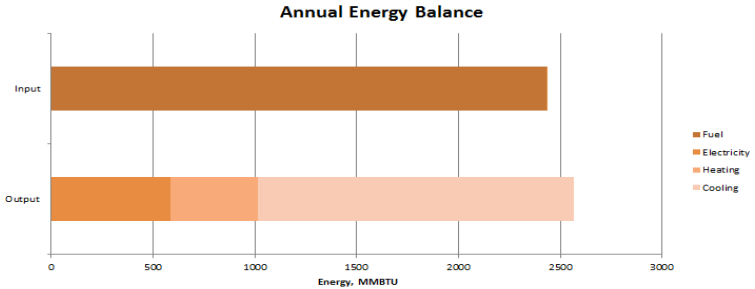
Tab 1: Color Codes

- Provides a guide to the cell colors

Color Codes	
Blue	For user-provided inputs. Any numbers currently in these fields are for the sake of illustration and may not represent reasonable assumptions.
Green	For CEC-provided default values. Modify them if you believe you have a more appropriate value, but be sure to cite your source.
Light Orange	For intermediate calculated values. Do not modify the formulas!
Dark Orange	For final calculated values. Do not modify the formulas!

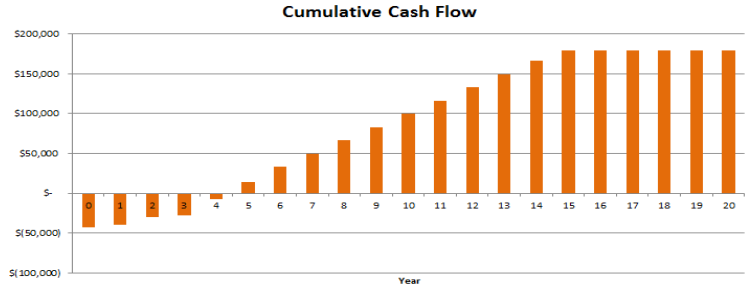
Tab 2: Engineering Data

- Enter technical values to produce an annual energy balance



Tab 3: Economic Data

- Enter cost values to produce a cumulative cash flow



How will my Application be Evaluated?
→ Application Screening

Application Admin Screening Process

1. Energy Commission staff screens applications per criteria in the solicitation (section IV.E).
2. Criteria is evaluated on a pass/fail basis.
   - ✓ Applicants must pass all screening criteria or the application will be disqualified.

Some Reasons for Disqualification

- ✓ Application not submitted by the specified due date and time.
- ✓ Applicant did not address one of the eligible project groups.
- ✓ Requested funding is outside of the specified minimum/maximum range.
- ✓ Application does not include one or more support letters.
- ✓ Application contains confidential material.

How will my Application be Evaluated?
→ Application Scoring (Groups 1, 2, and 3)

- **Evaluation Committee applies the scoring scale to the scoring criteria.**
- **Applications must obtain a minimum passing score of 70% for criteria 1-4 (or 49 points) in order to continue evaluation, and must also obtain a minimum passing score of 70% overall for criteria 1-7 (or 70 points), in order for an Application to be considered for funding. Passing applications will be considered bonus points.**
- **Each Applicant must review the Evaluation and Award Process section of the solicitation and ensure that the application provides a clear and complete response to each scoring criteria in the project narrative.**

Scoring Criteria (section IV.F)	Maximum Points
Technical Merit and Need	20
Technical Approach	20
Impacts and Benefits for CA IOU Ratepayers	20
Team Qualifications, Capabilities and Resources	10
Budget and Cost-Effectiveness	10
Natural Gas Funds Spent in CA	15
Ratio of Direct Labor and Fringe Benefit Costs to Loaded Labor Costs	5
Total	**100**
Minimum points to pass	**70**

How will my Application be Evaluated?
→ Application Scoring (Group 4)

- **Evaluation Committee applies the scoring scale to the scoring criteria.**
- **Applications must obtain a minimum passing score of 70% for criteria 1-2 (or 45.5 points) in order to continue evaluation, and must also obtain a minimum passing score of 70% overall for criteria 1-5 (or 70 points), in order for an Application to be considered for funding. Passing applications will be considered for bonus points.**
- **Each Applicant must review the Evaluation and Award Process section of the solicitation and ensure that the application provides a clear and complete response to each scoring criteria in the project narrative.**

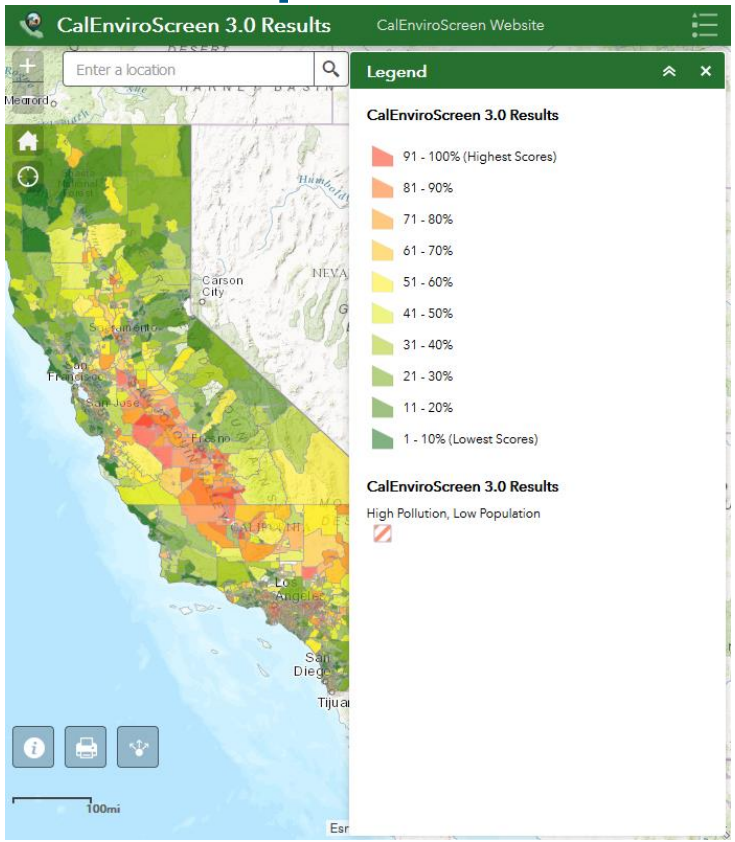
Scoring Criteria (section IV.F)	Maximum Points
Technical Approach	20
Team Qualifications, Capabilities and Resources	45
Budget and Cost-Effectiveness	10
Natural Gas Funds Spent in CA	15
Ratio of Direct Labor and Fringe Benefit Costs to Loaded Labor Costs	10
Total	**100**
Minimum points to pass	**70**

Disadvantaged Communities
Groups 1, 2 and 3

- Projects with all test or demonstration sites located in disadvantaged communities (and justifies how the project will benefit the disadvantaged community) will receive additional points.
- A disadvantaged community is identified by census tract and represents the 25% highest scoring tracts in CalEnviroScreen 3.0 or later versions.*

**CalEnviroScreen 3.0 Maps and Data*. Office of Environmental Health Hazard Assessment. https://oehha.ca.gov/calenviroscreen/report/calenviroscreen-30

Disadvantaged Communities Groups 1, 2 and 3



Additional Bonus Points

- **Applications must meet both minimum passing scores (Scoring Criteria 1-4 and 1-7) to be eligible for the additional points. Bonus point criteria include:**
- **Match Funding**
  - **Groups 1, 2, and 3 - above 10%**
  - **Group 4**
- **Disadvantaged Communities (Groups 1, 2, and 3)**
- **California Based Entities**

Scoring Criteria (section IV.F)	Maximum Points
Match Funding	10
Disadvantaged Communities **(Groups 1, 2, and 3)**	5
California Based Entities	5
Total Bonus Points (Groups 1, 2, and 3)	**20**
Total Bonus Points (Group 4)	**15**

Next Steps After Grant Award

- **Agreement Development:** Proposal documents will be processed into a legal agreement. (Approximately 8 weeks)
- **Failure to Execute:** If the Energy Commission is unable to successfully execute an agreement with an applicant, it reserves the right to cancel the pending award*
- **Project Start:** Recipients may begin the project only after full execution of the grant agreement (i.e., approval at an Energy Commission business meeting and signature by the Recipient and the Energy Commission)

***Refer to the Grant Manual, Section IV.B**

Questions and Answers

- Please state your name and affiliation as an introduction.
- Please keep questions under 3 minutes to allow enough time for others.
- Please note that our official response will be giving in writing in the Q&A document. We encourage you to submit all questions in writing in addition to asking them today.

Additional Questions?

Please send all questions related to GFO-17-501 to:

Angela Hockaday
Commission Agreement Officer
1516 Ninth Street, MS-18
Sacramento, CA 95814
(916) 654-5186
(916) 654-4423 (fax)
Angela.Hockaday@energy.ca.gov

Deadline to submit questions:
Monday, August 28, 2017 5:00 PM PDT